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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/827,535

Applicant(s)

CUNY ET AL.

Examiner

SRINIVASA R. REDDIVALAM

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1, 4, 5, 7-10, 13-15, 18, 20, 22, 25-27, and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosen et al. (US Pub. No: 2002/0173327) in view of Grob et al. (US Patent No: 5,960,362).

Regarding claim 1, Rosen et al. teach a method, comprising: sending first signaling (see Fig.2, 210 i.e. SIP channel used for first signaling from CD or 1st user equipment to CM) from first user equipment via a serving access network of the first user equipment to a first media communication server (see Fig.2, 204 wherein CM is Communications

Manager which is equivalent to first Media Communications Server) in response to a user's action during an established real-time media session (see para [0030], lines 1-7 wherein a floor control request is sent when the user presses the PTT switch located on CD i.e. user equipment); sending second signaling from the first media communication server towards the first user equipment (see Fig.2, 212 i.e. NBS Media Signaling used for second signaling from first media communication server towards the first user equipment and para [0042], lines 1-13); sending third signaling from the first media communication server towards second user equipment (see Fig.2, NBS Media Signaling between CM 204 and CD 208); and sending, immediately after one of the first, the second and the third signaling, media signaling wakeup messages from the first media communication server towards the first and a second user equipment (see para [0072], lines 1-9 wherein wakeup messages are sent to target listeners, assuming the current media session is inactive, then wakeup message is immediate), in order to trigger a dedicated-channel setup for at least one of the first and second user equipment in their respective serving access networks, and prior to beginning an actual user media stream from the first user equipment (see para [0072], lines 1-9 wherein sending wakeup trigger packets result in re-establishing dedicated traffic channel).

Rosen et al. teach the above method comprising sending media signaling wakeup messages immediately after one of the first, the second and the third signaling from the first media communication server towards the user equipment and **do not teach** specifically the method comprising sending **dummy media traffic** immediately after one

of the first, the second and the third signaling from the first media communication server towards the user equipment.

However, Grob et al. teach the method comprising sending dummy media traffic immediately to the user equipment (see col.8, lines 39-41 and col.9, lines 46-50 wherein the **user equipment receiving idle frames to preserve the link** is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Rosen et al. to replace media signaling wakeup messages with the dummy media traffic, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claim 4, Rosen et al. further teach the method according to claim 1, further comprising: sending, for a packet-mode voice communication, said first signaling in response to detecting in the first user equipment activation of a push-to-talk pressel (see para [0030], lines 1-7 wherein a floor control request is sent when the user presses the PTT switch located on CD i.e. user equipment).

Regarding claim 5, Rosen et al. further teach the method according to claim 1, wherein one of said first and second signaling comprises one of a session initiation protocol message, a real-time transport control protocol message, a session initiation protocol refer request, a session initiation protocol invite request, a real-time transport control

protocol floor request, and a real-time transport control protocol floor taken message (see para [0041] and lines 1-9).

Regarding claim 7, Rosen et al. teach a method, comprising: establishing a real-time media session between first user equipment (see Fig.2, 202 for CD i.e. first user equipment) and second user equipment via a serving access network of the first user equipment, via at least a first media communication server (see Fig.2, 204 for CM i.e. first Media Communications Server), and via a serving access network of the second user equipment (see Fig.2, 206 for CD i.e. second user equipment); and sending, by one of the media communication server and a support node in a packet-switched core network during inactive periods of the real-time media session, wakeup trigger towards at least one of the first and second user equipment (see para [0072], lines 1-9 wherein wakeup trigger is sent to target listeners and wakeup trigger is sent from the network during inactive periods of the media session) in order to reset an inactivity timer of a common channel state in the serving access network of the respective user equipment and to thereby prevent the respective user equipment from going to an idle state (see para [0072], lines 1-9 wherein sending wakeup trigger packets result in re-establishing dedicated traffic channel by preventing user equipment from going to an idle state).

Rosen et al. teach the above method comprising sending wakeup trigger towards at least one of the first and second user equipment and **do not teach** specifically the

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above method comprising sending **dummy media** towards at least one of the first and second user equipment.

However, Grob et al. teach the method comprising sending dummy media traffic towards at least one of the first and second user equipment (see col.8, lines 39-41 and col.9, lines 46-50 wherein **the user equipment receiving idle frames to preserve the link** is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Rosen et al. to replace media wakeup trigger messages with the dummy media, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claim 8, Rosen et al. teach the method further comprising: monitoring the media activity of the real-time media session in one of the first media communication server and the support node (see para [0103], lines 5-13) wherein quick paging channel is used by mobile for monitoring) and if no media activity is detected in the real-time media session for a predetermined period of time, sending said wakeup triggers traffic from the one of the first media communication server and the support node towards at least one of the first and second user equipment (see para [0098] wherein sending wakeup triggers by CM and CDMA infrastructure to trigger one or more pages to the mobile is equivalent to sending said dummy media traffic from the one of the first media

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communication server and the support node towards at least one of the first and second user equipment).

Rosen et al. do not teach specifically the above method comprising sending said dummy media traffic from the one of the first media communication server and the support node towards at least one of the first and second user equipment.

However, Grob et al. teach the method comprising sending dummy media traffic from the one of the first media communication server and the support node towards at least one of the first and second user equipment (see col.8, lines 39-41 and col.9, lines 46-50 wherein the user equipment receiving idle frames to preserve the link is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Rosen et al. to replace wakeup trigger messages with the dummy media traffic, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claims 9 and 10, Rosen et al. and Grob et al. in combination teach the method according to claim 7 and sending dummy media traffic. Rosen et al. further teach the method wherein the sending of said dummy media traffic to said at least one

of the first and second user equipment is sent only if the respective user equipment is located in an access network in which a dedicated channel setup can be triggered by dummy media traffic and the method further comprising notifying by the respective user equipment that it is located in an access network in which a dedicated channel set up can be triggered by dummy media traffic (see para [0072], lines 3-9 wherein sending wakeup triggers in SDB form/dummy media traffic from CM to target mobiles via appropriate infrastructure element to re-establish dedicated traffic channels is mentioned).

Regarding claim 13, Rosen et al. teach an apparatus, comprising: a receiver (see Fig.2, 204 wherein CM is Communications Manager which includes receiver) configured to receive first signaling sent by a first user equipment via a serving access network of the first user equipment in response to user's action during an real-time media session established between the first user equipment and a second user equipment (see para [0030], lines 1-7 wherein a floor control request is sent when the user presses the PTT switch located on CD i.e. user equipment); and a transmitter (see Fig.2, 204 wherein CM is Communications Manager which includes transmitter) configured to send second signaling towards the first user equipment upon receiving said first signaling (see Fig.2, 212 i.e. NBS Media Signaling used for second signaling from first media communication server/transmitter towards the first user equipment and para [0042], lines 1-13) and send third signaling towards the second user equipment upon receiving said first signaling (see Fig.2, NBS Media Signaling between CM 204 and CD 208); and send, immediately following one of the first, second, and third signaling, wakeup trigger

towards one of the first and second user equipment (see para [0072], lines 1-9 wherein wakeup trigger is sent to target listeners, assuming the current media session is inactive, then wakeup trigger is immediate) in order to trigger a dedicated channel setup for the one of the first and the second user equipment in a respective serving access network prior to beginning an actual user media stream from the first user equipment(see para [0072], lines 1-9 wherein sending wakeup trigger packets result in re-establishing dedicated traffic channel).

Rosen et al. teach sending wakeup trigger messages immediately following one of the first, second, and third signaling and **do not teach** specifically the apparatus comprising sending dummy media traffic immediately following one of the first, second, and third signaling.

However, Grob et al. teach sending dummy media traffic (see col.8, lines 39-41 and col.9, lines 46-50 wherein the user equipment **receiving idle frames to preserve the link** is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. to replace wakeup trigger messages

with the dummy media traffic, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claim 14, Rosen et al. further teach the apparatus, wherein one of said first and second signaling comprises one of a session initiation protocol message, a real-time transport control protocol message, a session initiation protocol refer request, a session initiation protocol invite request, a real-time transport control protocol floor request, and a real-time transport control protocol floor taken message (see para [0041] and lines 1-9).

Regarding claim 15, Rosen et al. and Grob et al. in combination teach the apparatus according to claim 13 and sending dummy media traffic. Rosen et al. further teach the apparatus wherein the transmitter is configured to send said dummy media traffic from the first media server to the one of the first and the second user equipment only if these are located in an access network in which a dedicated channel setup can be triggered by dummy media traffic (see para [0072], lines 3-9 wherein wakeup triggers in SDB form/dummy media traffic are sent from CM to target mobiles via appropriate infrastructure element to re-establish dedicated traffic channels).

Regarding claim 18, Rosen et al. teach an apparatus, comprising: an establisher (see Fig.2, 204 for CM i.e. first Media Communications Server as an establisher) configured to establish a real-time media session between a first user equipment and a second user equipment via a serving access network of the first user equipment and via a serving access network of the second user equipment (see Fig.2 and para [0037]); and

a transmitter configured to send, during inactive periods of the real-time media session, wakeup messages towards at least one of the first and second user equipment (see para [0072], lines 1-9 wherein wakeup messages are sent from CM to target listeners and wakeup messages are sent during inactive periods of the media session) in order to reset an inactivity timer of a common channel state in the serving access network of the respective user equipment and to thereby prevent the respective user equipment from going to an idle state (see para [0072], lines 1-9 wherein sending wakeup trigger packets result in re-establishing dedicated traffic channel by preventing user equipment from going to an idle state).

Rosen et al. teach the apparatus comprising a transmitter configured to send, during inactive periods of the real-time media session, wakeup messages towards at least one of the first and second user equipment and **do not teach** specifically the transmitter configured to send dummy media towards at least one of the first and second user equipment.

However, Grob et al. teach sending dummy media towards at least one of the first and second user equipment (see col.8, lines 39-41 and col.9, lines 46-50 wherein the user equipment **receiving idle frames to preserve the link** is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. to replace wakeup messages with the dummy media traffic, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claim 20, Rosen et al. and Grob et al. in combination teach the apparatus according to claim 18 and sending dummy media traffic. Rosen et al. further teach the apparatus wherein the transmitter is configured to send said dummy media traffic from the first media server to the second user equipment only if the second user equipment is located in an access network in which a dedicated channel setup can be triggered by dummy media traffic (see para [0072], lines 3-9 wherein wakeup triggers in SDB form/dummy media traffic are sent from CM to target mobiles via appropriate infrastructure element to re-establish dedicated traffic channels).

Regarding claim 22, Rosen et al. teach an apparatus, comprising: an establisher configured to establish a real-time media connection between user equipment located in a radio access network and a media communication server (see Fig.2 and the real-time media connection between CM 204 and CD 206); and a transmitter configured to send, during inactive periods of the real-time media connection, wakeup trigger towards the user equipment (see para [0072], lines 1-9 wherein wakeup trigger is sent to target listeners and wakeup trigger is sent from the network during inactive periods of the media session) in order to reset an inactivity timer of a common channel state in the radio access network and to thereby prevent the respective user equipment from going to an idle state (see para [0072], lines 1-9 wherein sending wakeup trigger packets

result in re-establishing dedicated traffic channel by preventing user equipment from going to an idle state).

Rosen et al. teach the apparatus, comprising transmitter configured to send wakeup trigger towards the user equipment and **do not teach** specifically transmitter configured to send dummy media towards the user equipment.

However, Grob et al. teach transmitter configured to send dummy media towards the user equipment (see col.8, lines 39-41 and col.9, lines 46-50 wherein the user equipment **receiving idle frames to preserve the link** is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. to replace wakeup trigger messages with the dummy media, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claim 25, Rosen et al. teach an apparatus, comprising: an establisher configured to establish a real-time media session via an access network and a media communication server (see Fig.2 where in a media session is established between CD i.e. an establisher and CM i.e. media communication server via an access network); and a transmitter configured to send a first signaling (see Fig.2, 210 for SIP which is first

signaling from CD i.e. transmitter) via the access network to the media communication server in response to user's action during the established real-time media session(see para [0030], lines 1-7 wherein a floor control request is sent when the user presses the PTT switch located on CD i.e. user equipment), and send immediately following the first signaling wakeup messages to the media communication server (see Fig.3, para [0059], lines 1-6 and para [0064], lines 3-14)) in order to trigger a dedicated channel setup for the user equipment in the access network of the first user equipment prior to beginning an actual user media stream (see paragraphs [0067] and [0068]).

Rosen et al. teach an apparatus, comprising a transmitter send immediately following the first signaling wakeup messages to the media communication server and **do not** teach specifically transmitter send immediately following the first signaling dummy media traffic to the media communication server.

However, Grob et al. teach transmitter send immediately following the first signaling dummy media traffic to the media communication server (see col.8, lines 39-41 and col.9, lines 46-50 wherein the user equipment sending and receiving idle frames to preserve the link is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. to replace wakeup trigger messages with the dummy media, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claim 26, Rosen et al. further teach the apparatus, wherein the transmitter is configured to, for a packet-mode voice communication, send said first signaling when detecting an activation of a push-to-talk pressel (see para [0030], lines 1-7 wherein a floor control request is sent when the user presses the PTT switch located on CD i.e. user equipment).

Regarding claim 27, Rosen et al. further teach the apparatus, wherein said first signaling comprises one of a session initiation protocol message, a real-time transport control protocol message, a session initiation protocol refer request, a session initiation protocol invite request, and a real-time transport control protocol floor request (see para [0041] and lines 1-9).

Regarding claim 33, Rosen et al. teach an apparatus, comprising: a receiving means (see Fig.2, 204 wherein CM is Communications Manager which includes receiver) for receiving a first signaling sent by a first user equipment via a serving access network of the first user equipment in response to user's action during an real-time media session established between the first user equipment and a second user equipment (see para [0030], lines 1-7 wherein a floor control request is sent when the user presses the PTT switch located on CD i.e. user equipment); and sending means (see Fig.2, 204 wherein

CM is Communications Manager which includes transmitter) for sending a second signaling towards the first user equipment upon receiving said first signaling (see Fig.2, 212 i.e. NBS Media Signaling used for second signaling from first media communication server/transmitter towards the first user equipment and para [0042], lines 1-13); signaling sending means for sending third signaling towards the second user equipment upon receiving said first signaling (see Fig.2, NBS Media Signaling between CM 204 and CD 208); and dummy media traffic sending means for sending, immediately following one of the first, second, and third signaling, wakeup trigger towards one of the first and second user equipment (see para [0072], lines 1-9 wherein wakeup trigger is sent to target listeners, assuming the current media session is inactive, then wakeup trigger is immediate) in order to trigger a dedicated channel setup for the one of the first and the second user equipment in a respective serving access network prior to beginning an actual user media stream from the first user equipment (see para [0072], lines 1-9 wherein sending wakeup trigger packets resulting in re-establishing dedicated traffic channel is mentioned).

Rosen et al. teach the apparatus comprising dummy media traffic sending means for sending wakeup trigger messages immediately following one of the first, second, and third signaling and **do not teach** specifically the apparatus comprising the means for sending dummy media traffic immediately following one of the first, second, and third signaling.

However, Grob et al. teach means for sending dummy media traffic (see col.8, lines 39-41 and col.9, lines 46-50 wherein the user equipment **receiving idle frames to preserve the link** is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. to replace wakeup trigger messages with the dummy media traffic in dummy media traffic sending means, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claim 34, Rosen et al. teach an apparatus, comprising: establishing means (see Fig.2, 204 for CM i.e. first Media Communications Server as an establisher) for establishing a real-time media session between a first user equipment and a second user equipment via a serving access network of the first user equipment and via a serving access network of the second user equipment (see Fig.2 and para [0037]); and sending means for sending during inactive periods of the real-time media session, wakeup messages towards at least one of the first and second user equipment (see para [0072], lines 1-9 wherein wakeup messages are sent from CM to target listeners and wakeup messages are sent during inactive periods of the media session) in order to reset an inactivity timer of a common channel state in the serving access network of the respective user equipment and to thereby prevent the respective user equipment from going to an idle state (see para [0072], lines 1-9 wherein sending wakeup trigger

packets result in re-establishing dedicated traffic channel by preventing user equipment from going to an idle state).

Rosen et al. teach the apparatus comprising sending means for sending during inactive periods of the real-time media session, wakeup messages towards at least one of the first and second user equipment and **do not teach** specifically sending means for sending dummy media towards at least one of the first and second user equipment.

However, Grob et al. teach sending means for sending dummy media towards at least one of the first and second user equipment (see col.8, lines 39-41 and col.9, lines 46-50 wherein the user equipment **receiving idle frames to preserve the link** is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. to replace wakeup messages with the dummy media traffic in sending means, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claim 35, Rosen et al. teach an apparatus, comprising: establishing means for establishing a real-time media connection between user equipment located in a radio access network and a media communication server (see Fig.2 and the real-time media connection between CM 204 and CD 206); and sending means for sending, during

inactive periods of the real-time media connection, wakeup trigger towards the user equipment (see para [0072], lines 1-9 wherein wakeup trigger is sent to target listeners and wakeup trigger is sent from the network during inactive periods of the media session) in order to reset an inactivity timer of a common channel state in the radio access network and to thereby prevent the respective user equipment from going to an idle state (see para [0072], lines 1-9 wherein sending wakeup trigger packets result in re-establishing dedicated traffic channel by preventing user equipment from going to an idle state).

Rosen et al. teach the apparatus, comprising sending means for sending wakeup trigger towards the user equipment and **do not teach** specifically sending means for sending dummy media towards the user equipment.

However, Grob et al. teach sending means for sending dummy media towards the user equipment (see col.8, lines 39-41 and col.9, lines 46-50 wherein the user equipment **receiving idle frames to preserve the link** is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. to replace wakeup trigger messages

with the dummy media in sending means, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

Regarding claim 36, Rosen et al. teach an apparatus, comprising: establishing means for establishing a real-time media session via an access network and a media communication server (see Fig.2 where in a media session is established between CD i.e. an establisher and CM i.e. media communication server via an access network); and sending means for sending a first signaling (see Fig.2, 210 for SIP which is first signaling from CD i.e. transmitter is shown) via the access network to the media communication server in response to user's action during the established real-time media session(see para [0030], lines 1-7 wherein a floor control request is sent when the user presses the PTT switch located on CD i.e. user equipment), and dummy media traffic sending means for sending immediately following the first signaling wakeup messages to the media communication server (see Fig.3, para [0059], lines 1-6 and para [0064], lines 3-14) in order to trigger a dedicated channel setup for the user equipment in the access network of the first user equipment prior to beginning an actual user media stream (see paragraphs [0067] and [0068]).

Rosen et al. teach an apparatus, comprising dummy media traffic sending means for sending immediately following the first signaling wakeup messages to the media communication server and **do not** teach specifically dummy media traffic sending

means for sending immediately following the first signaling dummy media traffic to the media communication server.

However, Grob et al. teach means for sending immediately following the first signaling dummy media traffic to the media communication server (see col.8, lines 39-41 and col.9, lines 46-50 wherein the user equipment sending and receiving idle frames to preserve the link is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. to replace wakeup trigger messages with the dummy media traffic in dummy media traffic sending means, disclosed by Grob et al. in order to preserve the traffic link and to improve the performance of the system.

4. Claims 6, 11, 12, 16, 21, 23-24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosen et al. (US Pub. No: 2002/0173327) in view of Grob et al. (US Patent No: 5,960,362) and further in view of Barany et al. (US Pub. No: 2002/0034166)

Regarding claims 6 and 11, Rosen et al. and Grob et al. together teach the method according to claims 1 and 7 respectively. Rosen et al. further teach the method, wherein the real-time media service is one of a push-to-talk service over cellular and a corresponding packet-mode voice communication service of a client-server type, the real-time media stream is packet- mode speech (see Fig.3, paragraphs [0024], [0044],

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and lines 1-2 of para [0044] wherein SIP protocol is used for controlling real-time media session).

Rosen et al. and Grob et al. do not yet teach for the method wherein at least one of the serving access networks comprises a radio access network of a wideband code division multiple access type.

However, Barany et al. teach SIP protocol used for call control signaling is communicated through the radio access network and radio access network can be of a wideband code division multiple access type (see para [0036], lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Rosen et al. and Grob et al. to include radio access network of WCDMA as one of the serving access networks disclosed by Barany et al. to support UMTS system.

Regarding claim 12, Rosen et al. and Grob et al. together teach the method according to claim 7. Rosen et al. and Grob et al. do not teach the method wherein the packet-switched core network is a general packet radio service (GPRS) type core network, and wherein the support node comprises one of a serving GPRS service node and a gateway GPRS service node.

However, Barany et al. teach the packet-switched core network is a general packet radio service (GPRS) type core network, and wherein the support node comprises one of a serving GPRS service node and a gateway GPRS service node (see para [0036], lines 8-15 and para [0037], lines 1-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Rosen et al. and Grob et al. to include SGSN and GGSN as support nodes in packet-switched core network disclosed by Barany et al. to support GPRS system.

Regarding claims 16 and 21, Rosen et al. and Grob et al. together teach the apparatus according to claims 13 and 18 respectively. Rosen et al. further teach the apparatus, wherein the real-time media service is one of a push-to-talk service over cellular and a corresponding packet-mode voice communication service of a client-server type, the real-time media stream is packet-mode speech (see Fig.3, paragraphs [0024], [0044], and lines 1-2 of para [0044] wherein SIP protocol is used for controlling real-time media session).

Rosen et al. and Grob et al. do not yet teach for the apparatus wherein at least one of the serving access networks comprises a radio access network of a wideband code division multiple access type.

However, Barany et al. teach SIP protocol used for call control signaling is communicated through the radio access network and radio access network can be of a wideband code division multiple access type (see para [0036], lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. and Grob et al. to include radio access network of WCDMA as one of the serving access networks disclosed by Barany et al. to support UMTS system.

Regarding claim 23, Rosen et al. and Grob et al. together teach the apparatus according to claim 22. Rosen et al. further teach the apparatus, wherein the real-time media service is one of a push-to-talk service over cellular and a corresponding packet-mode voice communication service of a client-server type, the real-time media stream is packet-mode speech (see Fig.3, paragraphs [0024], [0044], and lines 1-2 of para [0044] wherein SIP protocol is used for controlling real-time media session).

Rosen et al. and Grob et al. do not yet teach for the apparatus wherein at least one of the serving access networks comprises a radio access network of a wideband code division multiple access type.

However, Barany et al. teach SIP protocol used for call control signaling is communicated through the radio access network and radio access network can be of a wideband code division multiple access type (see para [0036], lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. and Grob et al. to include radio access network of WCDMA as one of the serving access networks disclosed by Barany et al. to support UMTS system.

Regarding claim 24, Rosen et al. and Grob et al. together teach the apparatus according to claim 22. Rosen et al. and Grob et al. do not teach the apparatus wherein the packet-switched core network is a general packet radio service type core network,

and wherein the support node comprises one of a serving general packet radio service support node and a gateway general packet radio service support node.

However, Barany et al. teach the packet-switched core network is a general packet radio service type core network, and wherein the support node comprises one of a serving general packet radio service support node and a gateway general packet radio service support node (see para [0036], lines 8-15 and para [0037], lines 1-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. and Grob et al. to include SGSN and GGSN as support nodes in packet-switched core network disclosed by Barany et al. to support GPRS system.

Regarding claim 28, Rosen et al. and Grob et al. together teach the apparatus according to claim 25. Rosen et al. further teach the apparatus, wherein the real-time media service is one of a push-to-talk service over cellular and a corresponding packet-mode voice communication service of a client-server type, the real-time media stream is packet-mode speech (see Fig.3, paragraphs [0024], [0044], and lines 1-2 of para [0044] wherein SIP protocol is used for controlling real-time media session).

Rosen et al. and Grob et al. do not yet teach for the apparatus wherein at least one of the serving access networks comprises a radio access network of a wideband code division multiple access type.

However, Barany et al. teach SIP protocol used for call control signaling is communicated through the radio access network and radio access network can be of a wideband code division multiple access type (see para [0036], lines 13-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. and Grob et al. to include radio access network of WCDMA as one of the serving access networks disclosed by Barany et al. to support UMTS system.

5. Claims 2, 3, 17, 19, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosen et al. (US Pub. No: 2002/0173327) in view of Grob et al. (US Patent No: 5,960,362) and further in view of Noel et al. (US Patent No: 7,266,382 B2)

Regarding claim 2, Rosen et al. and Grob et al. together teach the method according to claim 1 and sending dummy media traffic. Rosen et al. teach the method further comprising: setting an amount of dummy data and first signaling data together (see para [0087], lines 1-4 wherein caching the wakeup triggers/dummy data is mentioned).

Rosen et al. and Grob et al. do not teach specifically setting this data together till it exceeds a threshold level for triggering the dedicated-channel setup.

However, Noel et al. teach initiating a keep alive timer on the PTT server which causes dummy data to be sent as a measure to insure that the PTT requestor does not go into a dormant state (see col.6, lines 21-32) which is equivalent to setting the dummy data and signaling data together till it exceeds a threshold level for triggering the dedicated-channel setup.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Rosen et al. and Grob et al. to set an amount of dummy data and first signaling data together such that this data exceeds a threshold level for triggering the dedicated-channel setup disclosed by Noel et al. to minimize the PTT latency.

Regarding claim 3, Rosen et al. and Grob et al. together teach the method according to claim 1 and sending dummy media traffic. Rosen et al. teach the method, wherein said sending, immediately following one of the first, the second and the third signaling, of said dummy media traffic (see para [0071], lines 1-7 wherein wakeup messages/dummy media traffic are sent to target listeners in SDB form, assuming the current media session is inactive, then wakeup message is immediate).

Rosen et al. and Grob et al. do not teach specifically sending dummy media traffic is performed only if a session inactivity time prior to the first signaling exceeds a certain threshold.

However, Noel et al. teach sending dummy media traffic is performed only if a session inactivity time prior to the first signaling exceeds a certain threshold (see col.6, lines 35-39 wherein sending the dummy data prior to the expiration of the time period at which the mobile device goes dormant due to inactivity is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Rosen et al. and Grob et al. to include performing sending dummy media traffic only if a session inactivity time prior to the first signaling exceeds a certain threshold, disclosed by Noel et al. to prevent mobile device going into dormant state and to reduce PTT latency.

Regarding claim 17, Rosen et al. and Grob et al. together teach the apparatus according to claim 13 and sending dummy media traffic. Rosen et al. further teach the apparatus, wherein the transmitter is configured to send dummy media traffic to the first and/or second user equipment (see para [0071], lines 1-7 wherein sending wakeup trigger/dummy media traffic to target listeners in SDB form is mentioned).

Rosen et al. and Grob et al. do not teach specifically the transmitter to send dummy media traffic only if the session inactivity prior to first signaling exceeds a certain threshold, in order to limit the amount of unnecessary dummy data sent.

However, Noel et al. teach sending dummy media traffic only if the session inactivity exceeds a certain threshold prior to the mobile goes dormant (see col.6, lines 35-39 wherein sending the dummy data prior to the expiration of the time period at which the mobile device goes dormant due to inactivity is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. and Grob et al. to include the transmitter sending dummy media traffic to the first and/or second user equipment only if the session inactivity prior to first signaling exceeds a certain threshold, in order to limit the amount of unnecessary dummy data sent, disclosed by Noel et al. for optimizing the network traffic.

Regarding claim 19, Rosen et al. and Grob et al. together teach the apparatus according to claim 18 and sending dummy media traffic.

Rosen et al. teach the apparatus, further comprising a monitor which is configured to monitor media activity of the real-time media session in one of the first media communication server and the support node and to send said dummy media traffic (see para [0071], lines 1-7 wherein sending wakeup messages/dummy media traffic from CM to target listeners in SDB form is mentioned and wakeup messages are sent during inactive periods of the media session).

Rosen et al. and Grob et al. do not teach specifically for the monitor to send dummy media traffic if no media activity is detected in the real-time media session for a predetermined period of time.

However, Noel et al. teach the monitor to send dummy media traffic if no media activity is detected in the real-time media session for a predetermined period of time (see col.6,

lines 35-39 wherein sending the dummy data prior to the expiration of the time period at which the mobile device goes dormant due to inactivity is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. and Grob et al. to have the monitor sending dummy media traffic if no media activity is detected in the real-time media session for a predetermined period of time, disclosed by Noel et al. in order to prevent user equipment going into dormant state.

Regarding claim 29, Rosen et al. and Grob et al. together teach the apparatus according to claim 25 and sending dummy media traffic.

Rosen et al. and Grob et al. do not teach specifically the apparatus, wherein an amount of dummy data is such that the dummy data and the first signaling data together exceed a threshold level for triggering the dedicated channel setup.

However, Noel et al. teach initiating a keep alive timer on the PTT server which causes dummy data to be sent as a measure to insure that the PTT requestor does not go into a dormant state (see col.6, lines 21-32) which is equivalent to setting the dummy data and signaling data together till it exceeds a threshold level for triggering the dedicated-channel setup.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Rosen et al. and Grob et al. to set an amount of dummy data and first signaling data together such that this data exceeds a threshold

level for triggering the dedicated-channel setup, disclosed by Noel et al. to minimize the PTT latency.

Regarding claim 30, Rosen et al. further teach the apparatus wherein the apparatus is configured to keep the first signaling and the dummy data in a transmission buffer (see paragraphs [0095] and [0124] wherein buffering of media is mentioned to reduce the delays associated with re-establishing active traffic channels) until the triggered dedicated channel setup has been completed, and to send the first signaling and the dummy data over the dedicated channel (see para [0066], lines 1-7).

Regarding claim 31, Rosen et al. further teach the apparatus wherein the transmitter is configured to send the first signaling completely before sending the dummy data and triggering the dedicated channel setup (see Fig.2, 210 for SIP which is first signaling from user equipment sent to media communication server).

Regarding claim 32, Rosen et al. and Grob et al. together teach the apparatus according to claim 25 and sending dummy media traffic. Rosen et al. teach the apparatus, wherein the apparatus is configured to send dummy media traffic to the media communication server (see Fig.3, para [0059], lines 1-6 and para [0064], lines 3-14)).

Rosen et al. and Grob et al. do not teach specifically for the apparatus wherein sending dummy media traffic only if the session inactivity time prior to sending the first signaling exceeds a certain threshold, in order to limit, the amount of unnecessary dummy data sent.

However, Noel et al. teach the apparatus wherein sending dummy media traffic only if the session inactivity time prior to sending the first signaling exceeds a certain threshold (see col. 6, lines 35-39 wherein sending the dummy data prior to the expiration of the time period at which the mobile device goes dormant due to inactivity is mentioned).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the user equipment of Rosen et al. to include sending dummy media traffic only if a session inactivity time prior to the first signaling exceeds a certain threshold disclosed by Noel et al. to prevent mobile device going into dormant state and to reduce PTT latency.

Conclusion

6. Any response to this office action should be faxed to (571) 273-8300 or mailed

To:

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P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

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Alexandria, VA 22314.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SRINIVASA R. REDDIVALAM whose telephone number is (571)270-3524. The examiner can normally be reached on Mon-Fri 9:30 AM - 7 PM (1st Friday OFF).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag Shah can be reached on 571-272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Srini Reddivalam

06/10/2008

/Chirag G Shah/

Supervisory Patent Examiner, Art Unit 2619